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GRADUAL ESCALATION BOMBING: ROLLING THE DICE IN KOSOVO

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This paper is submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract of

GRADUAL ESCALATION BOMBING:
ROLLING THE DICE IN KOSOVO

The North Atlantic Treaty Organization (NATO) strategy for conducting operations in Kosovo was gradual escalation bombing. The "success" of Operation ALLIED FORCE has set a precedent for future conflicts, but United States (U.S.) administrations and Commander-in-Chiefs (CINCs) need to consider the limitations of a gradual escalation strategy and must look past political facility when employing airpower in the future.

U.S. airmen believe that a "classical air campaign" that conducts massive parallel attacks against an enemy's strategic centers of gravity is the proper way to employ airpower. The Vietnam War produced a general hatred among airmen toward gradual escalation and airmen saw the advent of precision-guided munitions as the technological innovation that would finally validate traditional airpower theories. The outstanding successes in the Persian Gulf War solidified their doctrine. However, the air operations in Kosovo bore a striking resemblance to Vietnam and airmen again lamented over the improper use of airpower.

Airmen do not believe that gradual escalation is the only strategy that can be employed in politically sensitive situations. Technology has enabled the U.S. to conduct precision strikes that produce minimal collateral damage. Furthermore, the dichotomies of gradual escalation invalidate the reasons used to justify its employment in the first place.

War by any means is full of risks. However, a gradual escalation strategy increases the risks to U.S. forces because of the restrictions placed on airmen and the fact that it only selectively targets the enemy's means to resist. Furthermore, if he decides to fight, the enemy can drag out the campaign and dramatically influence the detrimental effect that time can have on our cause and other world contingencies.

"I believe the way to stop ethnic cleansing was to go at the heart of the leadership and put a dagger in that heart as rapidly and decisively as possible. I'm not so naïve as to believe that politicians will ever just turn soldiers loose... but in this particular conflict we were constrained to an extraordinary degree and prevented from conducting an air campaign as professional airmen would have wanted it conducted."[1]

Lieutenant General Michael Short, Joint Force Air Component Commander (JFACC) for Operation ALLIED FORCE.

NATO's apparent success against Slobodon Milosevich has pundits basking in a supposed breakthrough in the use of military force to conduct what has been termed "The doctrine of immaculate coercion."[2] Their weapon of choice to conduct this type of warfare in Kosovo was the politically feasible strategy of gradual escalation bombing. However, gradual escalation should not be considered a viable strategy because it negates the inherent strengths and tenets of aerospace forces to such a degree that it completely nullifies the benefits airpower brings to the operational factors of time, space, and forces. Furthermore, a gradual escalation strategy increases the risks inherent in all air operations and actually produces several conflicting dichotomies that can invalidate the reasons some may use to justify its employment. Nevertheless, airmen and their civilian leaders continue to debate the method of U.S. airpower employment in Kosovo and future conflicts. The debate centers on airmen's beliefs that a "classical air campaign" is the quickest and most efficient way to employ aerospace forces, while a gradual escalation strategy unnecessarily risks lives for unpredictable and intangible goals. The Vietnam War produced a general hatred among aviators from all services toward gradual escalation,[3] and even today, professional airmen declare that politicians do not understand proper airpower employment. Politicians retort that airmen do not understand politics. However, it is not simply a matter of political facility.

Harvard economist Thomas Schelling first proposed gradual escalation warfare in the mid-1960s. His book, *Arms and Influence*, written during the height of the Cold War,

became popular among U.S. policymakers managing the conflict in Vietnam.[4] Schelling maintained that one nation's power, ability, and threat to hurt another could be used to deter or compel an adversary into rethinking his motives. When compelling an adversary, the country imposing the pain was supposedly in complete control of the situation and could rationally increase or decrease the pain at any time until the adversary capitulated. The strategy would naturally be more intertwined with the politics of the situation than forcible seizure or self-defense, thus the pace of diplomacy, rather than battle, would govern the action.[5] Schelling maintained that the compellent power should focus on the destruction of semi-vital targets that would lead the enemy to fear potential future loss of his important targets. Furthermore, certain targets such as government communication links should not be attacked because the enemy might be unable to convey stopping orders to his troops in the field or signal for peace negotiations.[6]

Schelling acknowledged certain limitations to his theory.[7] First, the power inflicting the punishment had to be conventionally dominant and if the enemy possessed nuclear weapons and would resort to using them, all bets were off. Second, the enemy must be given enough time to comply, but not so much that compliance became unnecessary. Third, and the most difficult, the compellent power had to know what the adversary treasured and what scared him. Fourth, the enemy had to know what was required of him to cause the punishment to stop, and the onus of communicating that information rested with the compellent power. Fifth, the demands placed on the adversary would have to be more attractive to him than the consequences, and should not entail costs in reputation or prestige that outweighed the threat.[8] Sixth, there would be limits as to how long the compellent action could be sustained without costing too much, and compliance may not occur within

that time. Seventh, if compliance necessarily took time—such as evacuation of a place the enemy must not re-enter or cessation of an activity he must never resume—the compellent power had to maintain a viable threat because the enemy had made a *rational* choice to comply, but his means to resist would still be intact.[9] Objectively, these limitations make gradual escalation a risky proposition, but to understand airmen's aversion to such a strategy one must be aware of the traditional airpower theories, built on experience and the inherent strengths of aerospace forces, that shaped Air Force doctrine today.

The roots of airpower doctrine can be traced back to World War I when Italian Brig Gen Giulio Douhet constructed the first coherent airpower philosophy. Douhet's theory proposed that air forces should first achieve air superiority, and then focus on the strategic bombing of industrial and civilian centers. Influenced by the carnage of the war, Douhet felt that attacks on vital strategic centers, rather than an enemy's fielded forces, would defeat an adversary's will to resist without a long and costly war of attrition.[10] This philosophy sounds similar to Schelling's, but it differs considerably in two respects. First, Douhet did not see capitulation as a rational act of an adversary fearful of potential loss, but as an act of last resort by an adversary facing incredible internal strife. Second, the time required to achieve the enemy's surrender could be compressed by the massive employment of airpower, not the gradual escalation bombing of targets. Douhet argued that the simultaneous bombing of population centers, supply depots, industrial plants, railroad centers, et cetera, would essentially defeat an enemy in three days.[11] His influence spread to American theorists like Brig Gen Billy Mitchell, who came to believe that nations were controlled by vital centers protected by layers or crusts. While attacking *armies or navies* had to fight their way through the layers, airpower could bypass these protecting elements and attack directly and

simultaneously at the source of a nation's power. Theorists at the Air Corps Tactical School (ACTS) at Maxwell Field, Alabama (today's Air University) were of the same mind, and by 1941 these young airmen had developed a coherent doctrine that focused on the destruction of a nation's industrial capability to wage war. [12]

Throughout World War II, the Army Air Corps struggled to prove the advantages of airpower. The theories of the ACTS were put to the test and produced successes, but not of the scale that the airpower theorists had envisioned. Airmen blamed the shortfall on technological limitations such as the limited range of escort fighters and the inaccuracy of bombing systems. Additionally, they felt Army leaders, who did not understand the inherent strengths of air forces, had improperly employed airpower. Despite their disappointments, airmen believed that post-war technological advances would finally enable airpower theories to become reality, and they did not significantly change their doctrine.

The jet age brought some of the technological changes airmen had been anticipating. Aircraft speed, range, accuracy, and the advent of the atomic bomb gave airmen the clout they needed to set up a separate and strategic air force. A new Air Force Manual, (AFM) 1-2, solidified the doctrine of airpower as a tool usable across the entire spectrum of conflict,[13] and espoused airmen's theories that an enemy's national structure would collapse if airpower was decisively employed against his vital centers of industry and other sensitive targets. Notably, this manual was drafted during the Korean War, which was thought to be an aberration in which the Air Force was hamstrung by political restrictions not faced during World War II or likely to be in place during a war with the Soviet Union. The feeling was that if strategic bombing could deter a general war, it could win small wars as well.[14]

Initially, United Nation forces waged an aggressive air campaign in Korea, producing considerable results. However, increasing concerns over Chinese involvement and U.S. casualties led the United Nations to adopt an "active defense" posture halfway through the war. During the negotiations of 1951, targets near the Yalu River were off-limits and many areas became highly restricted. The North Koreans used this time to reorganize, reinforce, and resupply, while numerous underground shelters were built to protect their forces from air attacks.[15] The war continued for another two years, and a permanent peace treaty was never signed. Airmen did not recognize that these restrictions foreshadowed events that would take place 12 years later, and consequently, airpower theory did not significantly change.

The Vietnam War's gradual escalation strategy was a brutal surprise for airpower advocates. Keeping in line with traditional doctrine, the Air Force developed an initial "genteel Douhet"[16] plan to launch an all-out attack against 94 targets in 16 days to quickly destroy North Vietnam's ability to continue as a viable industrial state and thus defeat the enemy's capability and will.[17] Considered genteel because it would avoid intentional direct attacks on civilians, the first priority was to gain air superiority followed by the destruction of North Vietnam's oil facilities and industrial complex. Not all service chiefs agreed on the prioritization of the targets, particularly the Army, which advocated interdiction of North Vietnamese supply lines into South Vietnam. Military men did agree that speedy execution was critical, and that the sudden violence of the campaign would shut down the infiltration, create panic, and cause Hanoi to give up its external claims and focus on internal problems.[18] However, the Johnson administration's policy called for the slow and gradual expansion of air attacks against increasingly important targets in an attempt to coerce, not destroy North Vietnam. A "lenient" Schelling strategy was employed for most of 1965 that imposed

relatively mild punishment compared to what the U.S. could have inflicted.[19] Bombing started south of the 19th parallel and proceeded north toward more important targets, producing no results. Phase two shifted focus to the Army interdiction plan for the next year and a half, producing limited successes. Still the enemy did not capitulate. The genteel Douhet plan was implemented from the spring to fall of 1967, and President Johnson removed many of the bombing restrictions except in parts of Hanoi and other areas, including Haiphong and its harbor. By the end of 1967, it was clear that results were not forthcoming and under political pressure, Johnson began to deescalate the bombing and re-impose restrictions. In addition to losing over 1000 U.S. aircraft, the failure of ROLLING THUNDER extended the war by four years, costs the lives of 20,000 Americans, and contributed to the collapse of Johnson's presidency.[20]

ROLLING THUNDER failed for a number of reasons. Some have argued that North Vietnam, being an agrarian nation conducting guerilla warfare, was immune to conventional bombing at this time.[21] Airmen, however, believed that this "strategic campaign" was a half-hearted and improper use of airpower.[22] Johnson picked targets at his Tuesday morning lunch meetings without the counsel of professional airmen. While most of the 94 targets on the Air Force list were eventually hit, it took almost three years, not 16 days. Additionally, Haiphong, where over 80 percent of North Vietnamese war goods entered the country, was off limits. Air superiority was not sufficiently established because airfields were not hit until two years into the campaign, and most surface-to-air missile sights were excluded until they actually fired at U.S. aircraft.

In 1972, President Nixon ordered three more bombing campaigns. FREEDOM TRAIN, launched in April, was a Schelling plan even more lenient than Johnson's. It failed

miserably. LINEBACKER I was conducted from May to October and although the North Vietnamese apparently capitulated, negotiations broke down and LINEBACKER II was launched two months later. Both were interdiction operations and in fact, had many of the same targets because North Vietnam had used the two-month bombing halt to rebuild key choke points and facilities in its logistics network. Both also had many of the political constraints removed, including the bombing of Haiphong. However, LINEBACKER II followed a much quicker pace than before, and in only twelve days the U.S. flew almost half as many sorties against North Vietnam than had been flown in the six months of LINEBACKER I.[23] Shortly thereafter, North Vietnam signed the Paris accords.

Airmen attributed LINEBACKER's success to the massive employment of concentrated airpower and the advent of the laser guided bomb (LGB). Targets that had taken tons of bombs to destroy during ROLLING THUNDER could be destroyed with several LGBs during LINEBACKER.[24] Airmen saw this weapon as a conventional force multiplier that would finally allow traditional airpower theories to become reality. However, it was clear that Vietnam had left an indelible impression on the U.S. Air Force, and the efficacy of true strategic bombing seemingly reaffirmed in LINEBACKER II was short lived. Many in the Air Force realized that classical airpower doctrine did not apply when the object of the war was not to destroy the enemy. The Air Force was still a relatively new element of the U.S. military at this time, and the failures in Vietnam propelled the service into an identity crisis that would last for the next 15 years.[25]

By the late 1980's, the Air University was actively working on another doctrine manual that incorporated some of the long-held traditional tenets of airpower while modifying others. Completed in 1992, AFM 1-1 explained the use of aerospace power in an

overall military effort and expounded on airpower's various roles, including military activities short of war. Most of the doctrine, however, was still rooted in traditional theories. In Washington during this time, airpower theorist Col John Warden, who later became the Commandant of the Air Command and Staff College at the Air University, was proposing a conglomeration of traditional airpower ideas he called the Theory of the Five Rings. Warden espoused that potential enemies possessed two elements—the physical means and the morale—to conduct war. Morale was unpredictable, but the enemy's physical means was tangible, and one should focus on this element to defeat an adversary. In so doing, this theory would apply to industrial states as well as guerilla organizations.

Warden argued that strategic war centered on objectives, not just the tactical defeat of an enemy's fielded forces. In order to develop a coherent air campaign, one must think strategically, focusing on the totality of an enemy composed of subsystems that had a more or less important effect on the rest of the system. These subsystems were made up of five layers or rings, with the center being the most important. At the center was the enemy leadership, followed by organic essentials (electricity, oil, food), infrastructure (roads, airfields, factories), the population, and finally the fighting or defending mechanism of military forces. The five rings model provided a good starting point for considering possible centers of gravity and critical vulnerabilities, and every country would have unique features to it's rings and their importance. If directly destroying the enemy leadership was not feasible, shutting down his command communications and links could have decisive effects if his forces were heavily dependent on command and control. When dealing with a country beyond the agrarian stage, the destruction of its electrical power grid would have an incredible impact. However, air campaigns against fielded forces alone should be minimized

because it would result in the longest and bloodiest exchange for both sides. Determined not to repeat the mistakes of Vietnam, air planners termed the air operations in Iraq INSTANT THUNDER, and put Warden's theory and the draft of AFM 1-1 to the test.

The success of airpower in Iraq was stellar in all areas and served as an antidote for the self-doubt plaguing the U.S. Air Force.[26] The U.S. developed a plan that would conduct three simultaneous phases, followed by a fourth. Phase one called for strategic attacks against the command and control structure, weapons of mass destruction facilities, and electric, oil, and transportation industries. Phase two would gain air superiority over Iraq, while phase three would interdict supply lines to isolate the Iraqi army in preparation for surface forces. Phase four called for the close support of coalition ground forces once they arrived.[27] Strategically, the U.S. attacked every one of Iraq's "rings" except the population, which was purposely avoided. Within the first minutes of the war, the primary Iraqi command and control communications system, the telephone, went out. The television system was also destroyed quickly, and within three weeks, the regime was unable to communicate with the majority of its forces and people. The lights went out in Baghdad minutes after the war started. Subsequent attacks forced the Iraqis to shut down the whole national grid, resulting in the closing of the majority of factories because they were dependent on long-haul power. Iraq's oil refining capability was quickly shut down, significantly impacting the mobility of the Iraqi forces. It is important to note that these systems were shut down, not obliterated, so that rebuilding could be facilitated as soon as the political objectives were met, and throughout the campaign, coalition forces went to great lengths to avoid collateral damage. Coalition aircraft brought rail traffic to a halt in the first week by destroying the Euphrates Bridge, and within four weeks, the coalition had destroyed

fifty bridges, significantly affecting Iraq's mobility and supply system. Simultaneously, stealth aircraft attacked nearly all the major defense nodes to gain air superiority. With the loss of communications and electricity, the Iraqi command and control structure was deaf, dumb, and blind. Airfields and aircraft took a little longer, but by the *second week*, air supremacy was achieved and Iraq was helpless to stop coalition aircraft. The air campaign in Iraq paralyzed a country of 16 million people and its million-man army in only 43 days.[28]

With the successes in Iraq, airmen saw proof that technology had finally enabled traditional airpower theory to become reality.[29] In September 1997, the Air Force published a new manual, the Basic Air Force Doctrine Document (AFDD-1). Similar to past manuals, AFDD-1 states that the inherent strengths of airpower give it significant advantages over surface forces. As such, aerospace forces have certain tenets, or guiding principals, that should dictate their proper employment. To be integrated correctly into the overall military effort, aerospace forces should be commanded by an airman employing the strengths and tenets of airpower. An interesting relationship exists between these strengths of airpower, gradual escalation, and the operational factors of war.

Maneuverability, speed, range, flexibility, and versatility allow airpower to significantly decrease the operational factors of time, space, and forces. Because aerospace forces can operate in the third dimension, unfettered by lateral geographical boundaries, they are inherently maneuverable and can (and should) simultaneously attack at the strategic, operational, and tactical levels of war. The tremendous range and speed of today's aircraft gives airpower the ability to travel to any point on earth, dramatically reducing the reciprocal effects between time and space. The flexibility and versatility of aerospace forces give aircraft the ability to concentrate anywhere rapidly and to attack any type of target,

exponentially increasing mass and potency. By conducting parallel (simultaneous) attacks at all levels of war, aerospace forces become ubiquitous, bringing a new dimension to force multiplication and the compression of time. Additionally, these parallel attacks dramatically affect time, space, and forces by realizing the synergistic effects of concentrated airpower, and the simultaneous employment of another tenet of airpower—persistent attack—makes enemy response impossible by producing insuperable damage.[30]

Compare this to the serial attacks and/or self-imposed boundaries, such as longitudinal limits or restricted areas, inherent in a gradual escalation strategy. The time-compression benefits of airpower are completely nullified by intentionally withholding force in the hopes that the enemy will comply. Restricted areas and targets become safe havens for enemy concentrations and supply storage. From these havens, the enemy can alleviate the effects of a serial attack by increasing the defenses of targets that are likely to be attacked, concentrating his resources to repair damage to single targets, and conducting counteroffensives.[31] It logically follows that this makes airmen's tasks much more difficult and dangerous as the campaign drags on. Furthermore, the enemy now has time to continue conducting or completing the actions that compelled the attacking nation to act in the first place. The limitations of airpower are exasperated by a gradual escalation strategy because aerospace forces are transitory and cannot hold ground. Consequently, the negative effects of serial attacks described above allow the enemy to rebuild and reinforce with relative impunity in preparation for the next attack.

AFDD-1 also introduced the concept of "Decisive halt", which demonstrates that even today, airmen consider gradual escalation to be the antitheses of proper airpower employment. AFDD-1 states that today's adversaries will use asymmetric means to offset

U.S. strengths, such as weapons of mass destruction, information attacks, terrorism, and/or urban warfare. Thus, any delay in decisively and quickly halting an enemy will result in a difficult and expensive campaign that could cost lost coalition support, lost credibility, and could provide incentives for other U.S. enemies to begin conflicts elsewhere. Airpower provides the means to quickly and decisively halt adversaries and "force the enemy beyond their culminating point through the early and sustained overwhelming application of air and space power", thereby increasing U.S./allied possible branches and sequels.[32] While AFDD-1 clearly states the Air Force position on classical airpower employment, the strategy of gradual escalation would be employed again in 1999.

To airmen, the Kosovo air campaign resembled more the failure of Vietnam than it did the success of the Gulf War, and some privately termed the operation "Rolling Blunder."[33] In the summer of 1998, Air Force planners proposed a classical air campaign strategy of parallel attacks against 259 Serbian targets that included all of the elements in Warden's Five Rings except for the population. It was believed that 28 days would be required to achieve the stated objectives.[34] However, the possibility of collateral damage prompted politicians to select a gradual escalation strategy that would focus on the Serbian *military* in Kosovo in the hopes that after a few days, Milosevich would capitulate. Phase one began on 24 March 1999 and consisted of limited air operations against Serbian fielded forces in Kosovo south of the 44th parallel. Concurrently, strikes against the Integrated Air Defense System were conducted throughout the Federal Republic of Yugoslavia (FRY), and within the framework of a classical air campaign, this was the only element that was approved. The majority of Serbia, including the capital of Belgrade, was off limits. Phase one did not succeed in preventing the FRY from pursuing its campaign of ethnic cleansing,

and the air campaign became an ad hoc, micro-managed operation. The Supreme Allied Commander Europe (SACEUR), U.S. Army Gen Wesley Clark, and the National Command Authorities (NCA) began to personally select targets on a daily basis. Four days later, phase two was approved and attacks extended to the Serbian military infrastructure within Kosovo to include ammunition depots, telecommunications installations, and barracks. Phase three, which would extend the campaign to military targets north of the 44th parallel, was never approved. However, by a month into the air campaign it became apparent to NATO that a constrained, phased approach was not working.[35] On 24 April, SACEUR was given authority to expand the target list to certain strategic targets north of the 44th parallel within the confines of minimum collateral damage. As the campaign continued, selected petroleum storage facilities, electrical grids, bridges, and command and control targets were struck within and around the Belgrade area. Milosevich finally capitulated, and 78 days after operations began, NATO suspended the air strikes.

The reason for Milosevich's capitulation is still unclear. Some argue that it was a combination of the air attacks, NATO's resolve and unity, the actions of the Kosovo Liberation Army, the threat of NATO ground troops, and Russia's failure to come to the aid of the FRY.[36] Airmen saw these reasons as enablers that allowed an over-drawn campaign to eventually use properly applied airpower that could have been implemented from the start. By the end of the campaign, desertions within the Bosnian army were increasing, while food, fuel, and equipment were becoming increasingly scarce. The damage to Milosevich's infrastructure was widespread throughout the country, not just the fielded forces in Kosovo. Perhaps the leadership in Belgrade decided to capitulate either because they had sufficiently completed their mission, or because the costs of continuing it were now too high. Whatever

the reasons, the gradually applied airpower strategy did not result in a quick end to the atrocities and during the campaign, Milosevich forcibly deported over 740,000 Albanians and brutally murdered thousands more.[37]

A "classical air campaign" and the experiences that led to its development raise several questions about the operations in Kosovo and the employment of U.S. airpower in the future. For example, why did President Bush allow airmen to reasonably employ the inherent strengths of airpower in the Gulf War and President Clinton did not allow the same in Kosovo? Was it a matter of personalities or of the characteristics unique to each situation? Some have argued that Kosovo was a different situation than Iraq. Unlike Saddam, Milosevich did not blatantly invade a sovereign country nor directly threaten his neighbors. While the UN passed seven resolutions against the FRY, none of them specifically mentioned the use of force to stop Milosevich.[38] Consequently, legitimacy for U.S. operations in Kosovo was problematic, and the use of NATO (as an alternative to the non-supportive UN) was essential to acquiring that legitimacy. Additionally, the Kosovo operation signaled a new role for NATO's involvement in offensive actions, and while the UN alliance in the Gulf agreed on the course of action, the NATO alliance was split on how to achieve the desired end-state. Perhaps a gradual escalation strategy was the only option acceptable to the alliance, and supporters argue that this option produced "victory" and achieved all of the goals laid out at the beginning of Operation ALLIED FORCE.[39]

However, the Gulf War coalition was also very precarious, and it held up through a classical air campaign and follow-on ground war. The Bush administration leveraged U.S. influence to affect the passage of UN resolutions calling for the use of force against Iraq, and built a coalition that included 30 nations allied against Saddam Hussein, many of which were

his Islamic brethren. Another 18 nations provided support in the form of economic and military aid. Clearly, the Islamic nations that allied against Saddam felt threatened by his brazen actions, but Milosevich's actions were equally brazen and atrocious. President Clinton declared that the Kosovo campaign would "diffuse a powder keg at the heart of Europe that has exploded twice before with catastrophic results" and Britain's Prime Minister Tony Blair stated "Kosovo is on Europe's doorstep."[40] Britain was ready to commit ground troops immediately, and President Clinton's statement prohibiting this option put him at odds with Blair from the start.[41]

While the NATO alliance was successfully "held together", some have argued that ALLIED FORCE was actually a failure, citing Serbian terror and Albanian casualties that occurred while operations were underway.[42] Whether one accepts this argument or not, it is clear that the operations in Kosovo exposed many shortcomings in the use of NATO as an offensive coalition. The U.S. Department of Defense lessons learned report describes numerous problematic issues ranging from NATO's internal command relationship deficiencies to political-military interface problems.[43] In the final analysis, one should question why the U.S. chose to use all 19 members of NATO as a "legitimate" offensive alliance rather than building a selective coalition that would allow for a more liberal application of airpower or the employment of ground forces if necessary. While some NATO partners provided bases and airspace that were critical to the operations in Kosovo, others such as France provided less than eight percent of the total effort while insisting on a limited campaign. Generals Short and Clark have testified to the U.S. Senate Armed Services Committee that these restrictions hampered operations and unnecessarily put

American pilots at risk,[44] and in light of these admissions, the use of NATO as an offensive force operating under its current limitations should be re-examined.

Perhaps the next conflict will not resemble Operation ALLIED FORCE or be influenced by the political dilemmas or personalities that drove the Clinton administration to choose a strategy of gradual escalation. SACEUR implemented many self-imposed limitations to follow what he perceived to be the Clinton administration's wishes. The confrontations between Gen Clark and Gen Short concerning proper airpower employment are just now becoming public, and Gen Short believes that the proposal for a classical air campaign in Kosovo never made it past SACEUR's desk.[45] Another administration and/or another CINC may be able to effectively leverage alliance members and conduct the next air campaign very differently. Only time will tell, but one thing is presently clear—the conflict in Kosovo has set a precedent and some may be inclined to use it as a model for future conflicts. Before this model is automatically accepted, future CINCs and administrations must consider the inherent weaknesses of gradual escalation as described above, and the great dichotomies it presents in subsequent conflicts similar to Kosovo.

First, gradual escalation was selected in Kosovo because officials felt that this strategy was the best way to maintain alliance unity by controlling collateral damage while Milosevich quickly capitulated.[46] Thanks to the combination of stealth, electronic warfare, and LGBs, NATO achieved a one-sided war of attrition, and during the entire campaign only two alliance aircraft were lost and less than 1500 Serbian civilians were killed.[47] While this may seem to vindicate a gradual escalation strategy, statistics can be misleading. For example, *Iraqi* estimates of their civilian casualties during the "classical air campaign" of the Gulf War were less than 2300, and U.S. estimates put the figure even lower.[48] Furthermore,

Milosevich carried out atrocities for 78 days because he still had the means to continue. If gradual escalation is employed in the next conflict, thousands of American aircraft may be lost during a long and drawn out campaign in which the U.S., true to form, continues to fight an enemy that does not capitulate. Experience has shown that it is extremely difficult to predict what targets a belligerent adversary ultimately values over his own ambitions, and a gradual escalation strategy will prolong the campaign if we miscalculate and selectively target only those elements. If the enemy decides to continue, he *will* reinforce and resupply, and casualties to U.S. service personnel and civilians will surely follow, negating the reasons for selecting this type of strategy in the first place.

Second, because gradual escalation will likely produce a drawn out campaign, the coalition and the American people will need to remain steadfast for a longer period of time, and may become disenchanted by the very strategy that was employed to promote support. Future conflicts conducted similar to Kosovo and Vietnam may prove to be a double catastrophe for American domestic and foreign policy. Those who opposed the war in Vietnam hated us for waging it at all, while those who initially supported us came to despise our unwillingness to win. Machiavelli defines this as the most perilous situation for any leader. To avoid this pitfall, he states that one should use overwhelming power to win a quick and decisive victory, which will produce success by design, not chance, and "once it is achieved all will judge your actions to have been appropriate."[49] While this could lead to the "bully factor" that the U.S. justifiably avoids, if our cause is so fragile that gradual escalation is the only acceptable strategy despite our best diplomatic and public affairs efforts, we should question whether it is really a worthy cause.

Third, the loss of international prestige may become a sticky point for a gradual escalation strategy in similar conflicts. Schelling himself acknowledged that in order for the strategy to work, the demands placed on the adversary would have to be more attractive to him than the consequences, and should not entail costs in prestige that outweighed the threat. The fact that the U.S. is considering action against an adversary such as Milosevich demonstrates that the enemy has already committed atrocious acts that may result in an enormous loss of international prestige. Although he is still in power, Milosevich remains a marked man, confined to his borders and disgraced by the actions of his government, and one cannot imagine that the bombing of his semi-vital targets alone would cause him to quickly capitulate. Furthermore, the concern for world opinion that may prompt the U.S. to employ gradualism in the future will come into direct conflict with American prestige if the enemy *does not* capitulate. The U.S. will have to disregard world opinion and do what it takes to win, or quit and loose international prestige as we did in Vietnam.

Fourth, the issue of "human shields" will likely be present in many future conflicts. While this may be a problem in a classical air campaign such as Iraq, the fact that the alliance has chosen a gradual escalation strategy announces to our enemy that the potential for civilian casualties is driving our strategy and that our resolve and unity are questionable. This exposes the alliance's critical vulnerability, or perhaps even its center of gravity, and as the campaign drags out, the enemy has more time and opportunity to move masses of civilians to his vital targets, which might preclude us from hitting them once we finally reach that phase. Conversely, a classical air campaign immediately opens up a broad range of targets, and it would be difficult for the enemy to amass human shields in all of these locations. Additionally, by employing a classical campaign, we have stated quite clearly that

while we do not condone collateral damage, the situation is grave enough that the U.S. and our allies are unified and will take the necessary steps to stop the atrocities or aggression.

However, U.S. administrations may employ a gradual escalation strategy in the future. The Air Force still has no plan for conducting operations when the object of the war is not to destroy the enemy, and must immediately develop targeting priorities, force structures, specific intelligence requirements, and an overall strategy that can employ airpower in that type of struggle. Several points should be considered in the development of this strategy. First, air superiority, including the destruction of enemy air defenses and command and control (C^2), should always be completely achieved to alleviate the threat to U.S./Allied aircraft. Telephone systems and electrical power grids are a big part of C^2 and must be included in this phase or air superiority cannot be fully guaranteed. Second, naval quarantines can significantly reduce the flow of supplies to coastal nations and can be effectively controlled. They should be fully utilized, if applicable. Third, massive parallel attacks can still be conducted against targets at the strategic, operational, and tactical levels because precision guided munitions have made it possible to shut down systems within the enemy's strategic rings without obliterating them or causing massive collateral damage. The Joint Munitions Effectiveness Manuals (JMEMS) clearly define what it takes to shut down a variety of targets for a specified time ranging from a few hours to indefinitely. This can be accomplished by simply destroying the generators of an electrical plant while leaving the plant itself intact. If the enemy does not quickly and completely capitulate, the targets can be hit again before they become operational. If the adversary submits, the systems can reasonably be rebuilt once diplomacy has taken over. Among the enemy's strategic targets, certain systems such as oil refining capabilities, bridges, railways, and road systems will

provide significant "bang for the buck" while minimizing collateral casualties. These systems will demobilize an enemy while leaving his civilian population relatively unscathed.

Current U.S. leaders seem to be willing to gamble on gradual escalation. President Clinton later admitted that he was "50 percent sure that the operation in Kosovo would be over in a week",[50] and NATO's strategy did not seem to have a logical plan if Milosevich did not capitulate during that time. Military leaders must ensure that civilian officials are aware of the limitations of a gradual escalation strategy and the history and experience that has led airmen to believe in the "classical air campaign." With the technological superiority enjoyed by the U.S. today, a fifty-fifty proposition in conflicts such as Kosovo is unacceptable unless one is willing to risk American lives strictly for political facility. While 78 days is a relatively short time compared to the years spent on the Vietnam War, the U.S. has the technology and capability to have ended the conflict in Kosovo sooner. Precision-guided munitions have finally enabled the theories of Douhet, Mitchell, and the dashing young men at the ACTS to become reality. Ironically, that same technology has significantly decreased the "acceptable" level of collateral damage and is quite possibly the leading reason for the re-emergence of gradual escalation, despite failures of that strategy in the past. It is doubtful that any of those men would have believed it then or now. However, maybe the airpower theorists were wrong. If gradual escalation is used in the future, our enemy may not employ his means to resist. He may capitulate after only a few days of bombing his semi-vital targets even though he still possesses the means to continue. Maybe the U.S. will not have to respond to other contingencies in the world while we wait for him to decide.

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